

Answers to Even-Numbered Review Exercises from Chapters 3 and 5 | Test 2

Chapter 3 Review Exercises (pp. 197 - 200)

4. $(-5, 0)$ yes; $(1, 1)$ no
6. $(7, 2)$ yes; $(2, 7)$ no
12. nonlinear
14. linear
20. domain = $\{\frac{3}{4}, -12, 25\}$, range = $\{-\frac{1}{2}, 6, 0, 25\}$; not a function
22. domain = {triangle, square, rectangle parallelogram}, range = $\{3, 4\}$; function
24. domain = $\{-3\}$, range = $(-\infty, \infty)$; not a function
26. domain = $[-1, 1]$, range = $[-1, 1]$; not a function
28. $g(0) = 0$
30. $h(-1) = 9$
32. $f(5) = 0$
36. $f(1) = -2$
38. $x = 0, 2$
44. **A**
46. **D**
54. See graphing answer section
58. $m = -\frac{3}{4}$
64. undefined or no slope
66. $l_2 > l_1$
68. $l_1 > l_2$
72. perpendicular
74. neither
76. See graphing answer section
80. See graphing answer section
82. $x = -2$
84. $y = 5$
90. $y = -5$

92. $f(x) = -x - 2$

94. $f(x) = -\frac{3}{2}x - 8$

96. $f(x) = -\frac{3}{2}x - 1$

Chapter 5 Review Exercises (pp. 334 - 335)

4. -81

6. -1

8. $-\frac{1}{16}$

10. $12x^2y^3b$

12. $\frac{1}{a}$

14. $\frac{1}{2a^{17}}$

22. $\frac{a^2}{16}$

24. $\frac{1}{16x^2}$

26. $\frac{1}{8^{18}}$

28. $-\frac{1}{8x^9}$

30. $-\frac{27y^6}{x^6}$

32. $\frac{xz}{4}$ or $\frac{1}{4}xz$

34. $\frac{2}{27z^3}$

40. $\frac{x^3y^{10}}{3z^{12}}$